



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,952	05/03/2001	Marc Lurie	26625-703	6922

21971 7590 08/03/2006

WILSON SONSINI GOODRICH & ROSATI
650 PAGE MILL ROAD
PALO ALTO, CA 94304-1050

EXAMINER

RUTTEN, JAMES D

ART UNIT PAPER NUMBER

2192

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,952

Applicant(s)

LURIE ET AL.

Examiner

J. Derek Rutten

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/29/05, 5/19/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to Applicant's submission dated 5/1/2006, responding to the 2/1/2006 Office action provided in the rejection of claims 1-38, wherein claims 1, 15, 19, 25, 27, 29, and 36 have been amended, no claims have been canceled, and new claims 39-53 have been added. Claims 1-53 remain pending in the application and have been fully considered by the examiner.
2. Applicant has primarily argued that the claims are not unpatentable over the combination of Wright and Wadhwa. This argument is moot in view of a new ground of rejection made in view of "Principles of Object Oriented Analysis and Design" by Martin.

Claim Objections

3. Claim 42 is objected to because of the following informalities: There is no period at the end of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claim 43 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described

Art Unit: 2192

in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 43 recites: “...*the attributes required for interfacing a mobile software application with at least one of the plurality of backend applications including one or more data elements, data relationships, data dependencies, and data distribution attributes.*” The originally filed specification describes attributes in terms of fields and classes (see page 32 line 3 – page 33 line 3). However, the originally filed specification does not appear to describe data elements, data relationships, and data dependencies as “attributes”. As such, the characterization of such *data elements, data relationships, data dependencies* as *attributes* appears to be new matter. It is noted that Applicant has not provided an indication of where these new limitations find support in the originally filed specification. In the interest of further examination, these limitations will be interpreted as claimed in claim 1 as “...*the data model including one or more data elements, data relationships, data dependencies, and data distribution attributes.*”.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-27, 29-34, 36-38, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art of record U.S. Patent 5,857,201 to Wright, Jr. et al. (hereinafter

Art Unit: 2192

“Wright”) in view of “Principles of Object Oriented Analysis and Design” by Martin (hereinafter “Martin).

In regard to claim 1, Wright discloses:

A method (see column 13 line 1 – column 14 line 15) comprising:

distributing a software platform to a first enterprise, the software platform for use in connection with an enterprise computing system having a plurality of backend software applications; See Fig. 2 in conjunction with column 4 lines 62-67:

Referring to FIG. 2, a client/server system 130 of the present invention will be described. The client/server system 130 hereinafter may also be referred to as the FormLogic client/server system. The system 130 includes the database 102, the mail server 104', the LAN 106 and an administrator server 148.

the software platform including a data modeling program allowing creation of a data model ... required for interfacing a mobile software application with at least one of the plurality of backend applications - See column 6 lines 1-8:

The client database 172 serves as a temporary representation of the host database, e.g., 180, because the client cannot maintain a full-time connection to the FL server 132. On the server side, a Remote Database API has been developed that allows developers to efficiently manipulate the client database 172 while sending a minimum amount of data over the connection.

This passage illustrates the creation of a data model that permits a client to manipulate a temporary version of the host database.

and a deployment feature allowing deployment of at least a portion of the data model to a plurality of mobile computing devices. Column 6 lines 1-8 cited above describe the “Remote Database API” as a means for deploying at least a portion of the data model. FIG. 2 elements 136, 142, and 146 further detail use of mobile computing devices.

Wright does not expressly disclose *distributing the software platform to a second enterprise*. However, Wright teaches that a device should be able to connect to any enterprise data source. See column 1 lines 44-49:

This architecture should allow developers to create two way links between any existing enterprise data source on a network, such as a database, mail server, or internet news feed, and FormLogic client applications.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to distribute Wright's FormLogic platform to a plurality of enterprises. One of ordinary skill would have been motivated to connect a client to any enterprise data source existing on a network, and thus to distribute as many FormLogic platforms to as many enterprises as possible in order to permit such connection.

Wright also does not expressly disclose a *data model defining data elements, data relationships, data dependencies and data distribution attributes*. However, Martin teaches that data models provide relationships in object-oriented models including data elements, data relationships, and data dependencies. See page 82:

Object types have relationships with other object types.

Also see page 87:

As described earlier, object types can have more specialized types called *subtypes* and more general types called *supertypes*.

Martin further teaches data distribution attributes in terms of cardinality constraints. See page 83:

The term *cardinality constraint* refers to the restriction of how many of one item can be associated with another.

Note that this interpretation of "distribution attributes" is based on the discussion of distribution properties found on page 34 lines 8-13 of the originally filed specification.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Martin's data model with Wright's object management scheme (see column 2 lines 26-28) in order to easily and quickly build object-oriented model as suggested by Martin (see middle of page 82).

In regard to claim 3, the above rejection of claim 1 is incorporated. Wright further discloses connecting clients and servers using at least 3 distribution mediums in FIG. 2 elements 134/136, 140/142, and 147/146'. Distribution of the software platform to a first enterprise using a first distribution medium is inherent since without distribution the system could not be installed or operated. Wright does not expressly disclose *wherein the software platform is distributed to the second enterprise using a second distribution mechanism*. It would have been obvious to one of ordinary skill in the art at the time the invention was made to distribute Wright's software platform using any distribution means available. One of ordinary skill would have been motivated to use a modem if a user has telephone access, and the internet if the user has internet access, depending upon which method is easier, cheaper, and/or faster, etc.

In regard to claim 4, the above rejection of claim 1 is incorporated. Wright does not expressly teach differing categorizations of industries among enterprises. However, as the word "enterprise" is used to describe a computing environment existing in a business organization or corporation, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Wright's teachings among differing

industries. One of ordinary skill would have been motivated to provide data model representations to as many industries as possible in order to maximize potential profit from licensing and sales of software implementations.

In regard to claim 5, the above rejection of claim 1 is incorporated. Wright does not expressly disclose *receiving monetary value from the first and the second enterprises in connection with the distribution of the software platform*. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to collect payment for delivery of software. One of ordinary skill would have been motivated to make money for providing goods or services.

In regard to claim 6, the above rejection of claim 1 is incorporated. Wright further discloses: *wherein the software platform includes a development environment that allows creation of a software application that references the data model*. See column 3 lines 49-53.

In regard to claim 7, the above rejection of claim 1 is incorporated. Wright further discloses: *wherein the software platform is integrated with a backend software application of the first enterprise*. See column 6 lines 1-8.

In regard to claim 8, the above rejection of claim 1 is incorporated. All further limitations have been addressed in the above rejection of claim 7 above.

In regard to claim 9, the above rejection of claim 1 is incorporated. Wright further discloses: *using a mobile computing system to create a second software application, the second software application to control transfer of data with at least one of the plurality of backend applications of the enterprise computing system, wherein the second software application references the data model.* See column 2 lines 34-42. Note that Visual Basic is a development tool that runs on Microsoft Windows operating systems that are well known to run on mobile computing systems such as laptop computers.

In regard to claim 10, the above rejection of claim 9 is incorporated. Wright further discloses: *deploying the second software application onto a mobile application server, the mobile application server responsive to the enterprise computing system and responsive to the plurality of mobile computing devices.* See column 2 lines 34-42 as cited above.

In regard to claim 11, the above rejection of claim 10 is incorporated. Wright further discloses: *wherein data is transferred asynchronously between the first software application and the second software application.* See column 2 lines 43-49.

In regard to claim 12, the above rejection of claim 9 is incorporated. Wright further discloses: *wherein the mobile computing system uses a mobile domain.* See FIG. 2.

In regard to claim 13, the above rejection of claim 6 is incorporated. Wright further discloses: *the software application is a task specific software application that is targeted for use by a selected class of employees of an enterprise associated with the enterprise computing system.* See column 11 lines 10-17.

In regard to claim 14, the above rejection of claim 13 is incorporated. Wright further discloses: *wherein an employee using one of the mobile computing devices provides information so that the employee is authenticated as belonging to the selected class so that such employee is given access to the first software application.* See column 11 lines 8-13.

In regard to claim 15, Wright discloses:

A system integration method (see column 13 line 1 – column 14 line 15) comprising:

integrating a first computing system into a first enterprise network (See Fig. 2 element 132), the first computing system comprising:

an integration unit operable to access a backend application of the first enterprise network, the integration unit further operable to access a first data model ... required for

Art Unit: 2192

interfacing a mobile software application with a backend application and referencing at least one enterprise object associated with the backend application; See column 2 lines 43-49:

In one aspect of the present invention there is a client/server system, comprising a portable client computer, comprising a client database, and a communications module; a server computer, comprising a server data source, **a session module, in communication with the server data source**, to non-persistently connect to the communications module and access the client database from time to time.

Also see column 6 lines 46-51:

Because mobile clients cannot maintain a persistent connection to the FL server 132, they must "connect" for short periods of time to perform a specified operation or set of operations. Each of these connections is referred to as a "session", during which time a specified set of operations are performed between the FL client and FL server.

a connection unit responsive to a plurality of mobile computing devices, at least one of the plurality of mobile computing devices having access to the first data model;

See FIG. 3 elements 194 and 196 in conjunction with column 7 lines 31-35:

For example, as shown in FIG. 3, a **Connection object 194** may be associated with Client A 136 and a Connection object 196 may be associated with Client C 146. Each of these connections are independent, and a plurality of connections may be concurrent.

Wright does not expressly disclose *integrating a second computing system to a second enterprise*. However, Wright teaches that FormLogic can be used to connect to plural data sources. See column 3 lines 24-27:

The new FormLogic C/S architecture overcomes these limitations by allowing developers to create **direct links between PDAs and enterprise data sources** using industry standard development tools.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to distribute Wright's FormLogic platform to a plurality of enterprises to connect a plurality of computing systems. One of ordinary skill would

have been motivated to distribute as many FormLogic platforms as possible in order to maximize profit for vendors providing sales and support of the product.

Also, Wright's data model is not expressly disclosed in terms of a data model *defining data elements, data relationships, data dependencies and data distribution attributes*. However, As addressed in the above rejection of claim 1, Martin teaches these limitations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Martin's data model with Wright's object management scheme (see column 2 lines 26-28) in order to easily and quickly build object-oriented model as suggested by Martin (see middle of page 82).

In regard to claim 16, the above rejection of claim 15 is incorporated. Wright further discloses *further comprising providing integration services in connection with integrating the first computing system into the first enterprise network*. See column 3 lines 24-27 as applied in the above rejection of claim 15.

In regard to claims 17 and 18, the above rejection of claim 15 is incorporated. All further limitations have been addressed in the above rejection of claim 5.

In regard to claim 19, the above rejection of claim 15 is incorporated. Wright discloses a mobile software application accessing backend applications using data attributes. See column 7 lines 11-20. Note that data elements, relationships,

dependencies, and distribution attributes are taught by Martin as addressed in the rejection of claim 15.

In regard to claim 20, the above rejection of claim 15 is incorporated. Wright further discloses: *a data management module in communication with the integration unit and with the connection unit*. See FIG. 3 element 184 in conjunction with column 7 lines 26-31.

In regard to claim 21, the above rejection of claim 15 is incorporated. All further limitations have been addressed in the above rejection of claim 11.

In regard to claim 22, the above rejection of claim 20 is incorporated. Wright further discloses: *integration transaction data is transmitted between the data management module and the integration unit*. See column 7 lines 26-44 in conjunction with FIG. 3 elements 184/194/200.

In regard to claim 23, the above rejection of claim 22 is incorporated. Wright further discloses: *integration transaction data is transmitted between the integration unit and the back-end application*. See column 2 lines 43-49 as cited above.

In regard to claim 24, the above rejection of claim 22 is incorporated. Wright does not expressly disclose: *the back-end application is selected from the group*

consisting of an accounting program, a database program, an enterprise resource management program, and a customer relationship management program. However, Wright teaches that various data sources, including database, mail server, news feed, etc., exist on a network. See column 1 lines 41-49. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Wright's teaching of various data sources with Wright's integration method. One of ordinary skill would have been motivated to connect to any existing enterprise data source (column 1 lines 42-44).

In regard to claim 25, all limitations have been addressed in the above rejections of claims 1 and 15.

In regard to claim 26, the above rejection of claim 25 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 27, Wright discloses the FL Builder which builds applications based on code (column 6 lines 38-42). Wright further discloses mobility deployment code (column 6 line 63 – column 7 line 10). All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 29, Wright discloses:

identifying a provider of a software platform; and

receiving the software platform; See column 4 lines 62-65. Identification of a provider and reception of a software platform is inherent in installation of the system. Without identification, a platform could not be received, and without reception, the platform simply could not be installed. All further limitations have been addressed in the above rejection of claim 27.

In regard to claim 30, the above rejection of claim 29 is incorporated. Wright does not expressly disclose licensing software. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to license the software. One of ordinary skill would have been motivated to provide a conditional right to use software in exchange for compensation.

In regard to claim 31, the above rejection of claim 29 is incorporated. Wright does not expressly disclose: *distributing the software platform to another party*. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to send Wright's platform to a third party. One of ordinary skill would have been motivated to exchange software for monetary compensation.

In regard to claim 32, the above rejection of claim 29 is incorporated. Wright further discloses: *using the software platform*. See column 10 lines 41-42.

In regard to claim 33, the above rejection of claim 29 is incorporated. Wright does not expressly disclose: *making copies of the software platform*. However, copies would be inherent in the distribution to a second enterprise as discussed in the above rejection of claim 1, otherwise the only platform would have been sent to the first enterprise and would be unavailable.

In regard to claim 34, the above rejection of claim 29 is incorporated. Wright does not expressly disclose: *securing the right to distribute the software platform*. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain a copyright for software. One of ordinary skill would have been motivated to obtain the legal right for distribution of software in order to maximize potential profit of sales.

In regard to claim 36, Wright discloses:

hosting the software platform on a server. See Fig. 2 element 132: "FormLogic Server". All further limitations have been addressed in the above rejection of claim 29.

In regard to claims 37 and 38, the above rejection of claim 36 is incorporated. All further limitations have been addressed in the above rejections of claims 5 and 1, respectively.

In regard to claim 53, Wright discloses:

a data model ... actively employed in interfacing a mobile software application ...

See column 5 lines 52-59:

Upon connection, this local database 172 is automatically manipulated by the FL server 132. The FL server 132 can query the client database 172, add data to the client database, or remove data from the client database in order make updates to both **the client and server databases** to reflect changes that have happened on both sides since the last connection. Thus, a synchronization of the two databases is performed.

All further limitations have been addressed in the above rejection of claim 1.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright and Martin as applied to claim1 above, and further in view of prior art of record U.S. Patent 6,880,126 to Bahrs et al. (hereinafter “Bahrs”) in view of prior art of record U.S. Patent 6,871,146 to Iyengar (hereinafter “Iyengar”).

In regard to claim 2, the above rejection of claim 1 is incorporated. Wright and Martin do not expressly disclose a data model that is decoupled form a particular mobile or backend application. However, in an analogous environment, Bahrs teaches that an XML data model can be used to describe objects. See column 15 lines 43-48, column 17 lines 33-36, and column 31 lines 11-14. XML is a data format that provides a decoupling from any application since it is programming language and API-neutral as taught by Iyengar (see column 3 lines 39-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Bahrs’ teaching of a decoupled data model with the data model of Wright and Martin. One of ordinary skill would have been motivated to provide a data model using a format that is programming language and API neutral.

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright as applied to claim 27 above, and further in view of prior art of record prior art of record U.S. Patent 6,754,670 to Lindsay et al. (hereinafter "Lindsay").

In regard to claim 28, the above rejection of claim 27 is incorporated. Wright does not expressly disclose: *wherein the data model describes a naming and directory interface that associates enterprise names and objects in a binding that allows access to an SQL database system.* However, in an analogous environment, Lindsay teaches that object data can be bound to access a SQL database. See column 2 lines 19-34. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Lindsay's teaching of binding objects in a SQL database with Wrights data model. One of ordinary skill would have been motivated to flexibly accommodate changes in a relational database (column 2 lines 9-13).

10. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright as applied to claim 29 above, and further in view of prior art of record U.S. Patent 5,604,906 to Murphy et al. (hereinafter "Murphy").

In regard to claim 35, the above rejection of claim 29 is incorporated. Wright does not expressly disclose: *bundling the software platform with other software to create a bundled package.* However, in an analogous environment, Murphy teaches bundling

software. See Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to bundle Wright's software with other software. One of ordinary skill would have been motivated to increase the chances of a consumer purchasing more software by bundling it with a distributed package.

11. Claims 39, 45-47, and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright in view of Martin, and further in view of U.S. Patent 5,960,200 to Eager et al. (hereinafter "Eager").

In regard to claim 39, Wright and Martin do not expressly disclose: ... *the data model providing physical and logical views of data, describing transactions*... However, Eager teaches that relational data models provide several views of data and describes transactions. See column 20 lines 12-14:

The relational data model can be viewed at three different levels: conceptual, logical, and physical.

Also see column 20 lines 25-31:

In the relational model, a database schema consists of the description of the tables, their fields, and the fields formats and domains. **The relational algebra provides the theoretical basis for the model, with five operators:** selection, projection (deleting columns from table), product, union (adding the rows of two tables), difference and a composite: join.

All further limitations have been addressed in the above rejection of claim 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Eager's relational data model with Wright's mobile data model in order to enable faster application development and easier application maintenance (see Martin bottom of page 307).

In regard to claim 45, Wright discloses: *the dissemination of one or more data instances to one or more interested consumers*, See column 6 lines 1-8:

The client database 172 serves as a temporary representation of the host database, e.g., 180, because the client cannot maintain a full-time connection to the FL server 132. On the server side, a **Remote Database API** has been developed that allows developers to efficiently **manipulate the client database 172 while sending a minimum amount of data over the connection.**

All further limitations have been addressed in the above rejection of claims 1 and 39.

In regard to claim 46, the above rejection of claim 45 is incorporated. Wright further discloses: *wherein the one or more interested consumers includes a software instance deployed to one or more entities of a domain*. See column 5 lines 30-45.

In regard to claim 47, the above rejection of claim 46 is incorporated. Wright further discloses: *wherein the software instance includes an integration component operable to access, create, and update data instances in the domain directly while interfacing with one or more enterprise systems*. See column 5 lines 30-45.

In regard to claim 49, the above rejection of claim 45 is incorporated. Wright further discloses: *wherein at least one of mobile software application interacts with the mobile data model when referencing enterprise data*. See column 5 lines 46-59.

In regard to claim 50, the above rejection of claim 45 is incorporated. Wright further discloses: *wherein the mobile data model may be accessed to allow at least one*

mobile software application and the backend application access to an enterprise data store. See column 5 lines 46-59.

In regard to claim 51, the above rejection of claim 45 is incorporated. Wright does not expressly disclose: *wherein the mobile data model defines a physical view of data, an object oriented view of data and a logical view of data.* However, as discussed in the above rejection of claim 39, Eager teaches a data model having physical and logical views of data. Eager does not appear to expressly teach an *object oriented* view of data. However, Martin teaches that an object relationship diagram can be used to provide an object oriented view of data (See page 82 “Object-Relationship Diagrams”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Martin’s teaching of an object-oriented view of data with Eager’s physical and logical views of data to view Wright’s data model in order to enable faster application development and easier application maintenance (see Martin bottom of page 307).

In regard to claim 52, the above rejection of claim 45 is incorporated. Wright further discloses: *building one or more software applications referencing the mobile data model using the distributed software platform.* See column 6 lines 34-45.

Art Unit: 2192

12. Claims 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright in view of Martin and further in view of International Publication Number WO 00/31664 by Handel et al. (hereinafter "Handel").

In regard to claim 40, Wright and Martin do not expressly disclose: *wherein the data model contains elements that are mobile computing device user dependent*. All further limitations have been addressed in the above rejection of claims 1 and 15.

However, Handel teaches a data model that supports elements that are user dependent.

See page 1 lines 34-38:

According to a broad aspect of a preferred embodiment of the invention, a **data model to support user information** capture and storage is created by obtaining user profile information, grouping the user profile information in a logical manner, associating a unique name with the grouped user profile information, and **storing the grouped user profile information** and correlated name in a **database**. Access to the **profile information is restricted** and a customized user interface is created for each application **based on the current grouped user profile information**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Handel's teaching of user dependent data elements with Wright's data model in order to supply targeted information to a user (see Handel page 1 lines 29-31).

In regard to claim 41, the above rejection of claim 40 is incorporated. Wright further discloses: *the integration unit adapted to read from and write to a backend application by accessing the data model*. See column 2 lines 43-49.

In regard to claim 42, the above rejection of claim 40 is incorporated. Wright further discloses: *routing information flow between the integration unit, a mobile*

Art Unit: 2192

computing device and a backend application in accordance with the data model. See column 2 lines 43-49.

In regard to claim 43, the above rejection of claim 40 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 44, the above rejection of claim 40 is incorporated. All further limitations have been addressed in the above rejection of claim 26.

13. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright, Martin, Eager, Bahrs, and Iyengar.

In regard to claim 48, the above rejection of claim 45 is incorporated. All further limitations have been addressed in the above rejection of claim 2.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on T-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2192

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr



TUAN DAM
SUPERVISORY PATENT EXAMINER